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P.D. DZ-02-150P

P. 1-4

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1/1 - (C) FILE CA

STN CA Caesar accession number : 1997

AN - 128:48067 CA

ED - Entered STN: 27 Jan 1998

TI - Preparation of fluorenecarboxylic acid esters as electron-transporting materials for electrophotographic photoreceptors

IN - Nanba, Michihiko; Shoshi, Masayuki; Tadokoro, Kaoru

PA - Ricoh Co., Ltd., Japan

SO - Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DT - Patent

LA - Japanese

IC - ICM C07C069-76

ICS C07C067-08; C07C201-12; C07C205-37; C07C255-41; C09B057-00; G03G005-06

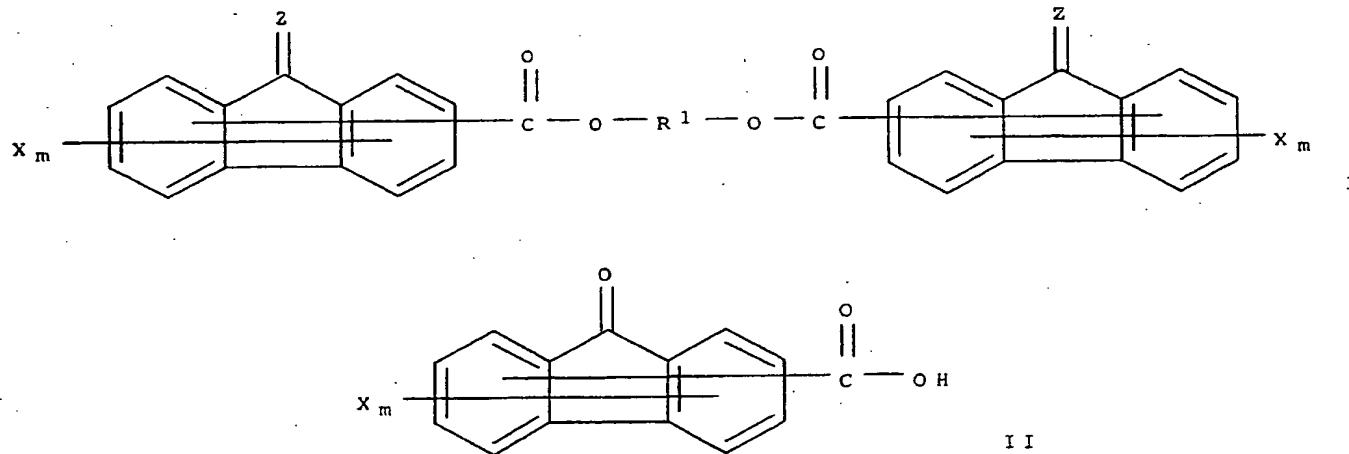
CC - 25-26 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

Section cross-reference(s): 74

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PN - JP9316036	A2	19971209	JP 1996-137298	19960530 <--
PRAI - JP 1996-137298		19960530		
OS - CASREACT 128:48067; MARPAT 128:48067				

GI



AB Title compds. I [Z = O, C(CN)2, C(CN)C(CO2R2); R1 = (substituted) alkylene, (substituted) arylene, (substituted) cycloalkylene; R2 = (substituted) alkyl, (substituted) aryl; X = cyano, NO2, halo (substituted) alkyl; m = 0-4] are prep'd. by reaction of fluorenes II (X, m = same as above) with R1(OH)2 (R1 = same as above) in the presence of acid and base catalysts and optional reaction of I (Z = O; X, R1, m = same as above) with H2CYCN (Y = CN, CO2R2; R2 = same as above) in the presence of acid and base catalysts. A PhMe soln. of 6.72 g II (2-CO2H, m = 0) (III) was treated with 2.19 g OH(CH2)8OH in the presence of p-MeC6H4SO3H·H2O at 100 degree. for 10

h to give 1.68 g I (Z = 0, R1 = C8H16, m = 0, OH(CH2)8OH was bonded to the 2-position of III) (IV). The electrophotog. photoreceptor contg. IV showed a surface potential of 1557 V and E1/2 9.0 lk.sec. diol esterification fluorenecarboxylic acid; fluorenecarboxylic acid ester prep; cyano compd condensation fluorenecarboxylic acid; electron transporting material fluorenecarboxylate prep; electron transporting material fluorenecarboxylic acid esters as electron-transporting materials for electrophotog. photoreceptors (photoreceptors)

IT Electrophotographic photoconductors (photoreceptors)  
(prep. of fluorenecarboxylic acid esters as electron-transporting materials for electrophotog. photoreceptors)

IT Esterification catalysts  
(prep. of fluorenecarboxylic acid esters by esterification with diols and optional condensation with cyano compds.)

IT 104-15-4, uses 109-02-4, N-Methylmorpholine 110-86-1, Pyridine, uses 865-47-4, tert-Butoxypotassium 7550-45-0, Titanium tetrachloride, uses

RL: CAT (Catalyst use); USES (Uses)  
(catalyst; prep. of fluorenecarboxylic acid esters by esterification with diols and optional condensation with cyano compds.)

IT	<u>198560-48-4P</u>	198560-51-9P	198560-54-2P	198561-05-6P
	<u>199943-32-3P</u>	199943-33-4P	199943-34-5P	<u>199943-35-6P</u>
	<u>199943-36-7P</u>	199943-37-8P	199943-38-9P	<u>199943-39-0P</u>
	<u>199943-40-3P</u>	199943-41-4P	199943-42-5P	<u>199943-43-6P</u>
	<u>199943-44-7P</u>	199943-45-8P	<u>199943-46-9P</u>	<u>199943-47-0P</u>
	<u>199943-48-1P</u>	199943-49-2P	199943-50-5P	<u>199943-51-6P</u>
	<u>199943-52-7P</u>	199943-53-8P	199943-54-9P	<u>199943-55-0P</u>
	<u>199943-56-1P</u>	199943-57-2P	199943-58-3P	<u>199943-59-4P</u>
	<u>199943-60-7P</u>	199943-61-8P		

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prep. of fluorenecarboxylic acid esters by esterification with diols and optional condensation with cyano compds.)

IT 78-78-4 80-05-7, reactions 105-08-8, 1,4-Cyclohexanedimethanol 109-77-3, Malononitrile 110-63-4, 1,4-Butanediol, reactions 562-49-2, 3,3-Dimethylpentane 589-29-7, 1,4-Benzenedimethanol 626-18-6, 1,3-Benzenedimethanol 629-41-4, 1,8-Octanediol 784-50-9, 9-Fluorenone-2-carboxylic acid 843-55-0 1478-61-1, 2,2-Bis(4-hydroxyphenyl)hexafluoropropene 1573-92-8, 9-Fluorenone-1-carboxylic acid 5459-58-5, Butyl cyanoacetate 6223-83-2, 9-Fluorenone-4-carboxylic acid 6807-17-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prep. of fluorenecarboxylic acid esters by esterification with diols and optional condensation with cyano compds.)

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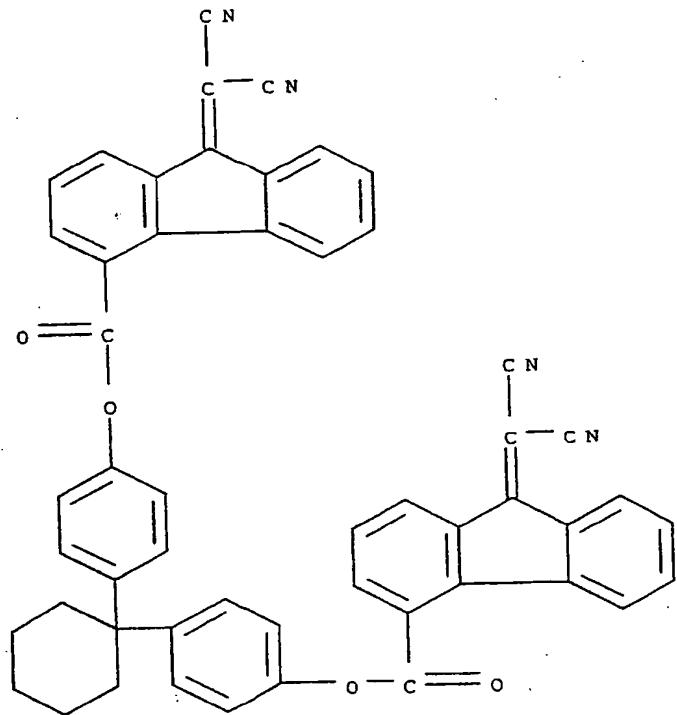
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L10 Substance 3/4 File ZREGISTRY - (C) ACS 2004

RN 198560-48-4

IN 9H-Fluorene-4-carboxylic acid, 9-(dicyanomethylene)-, cyclohexylidenedi-4,1-phenylene ester (9CI)

MF C52 H32 N4 O4

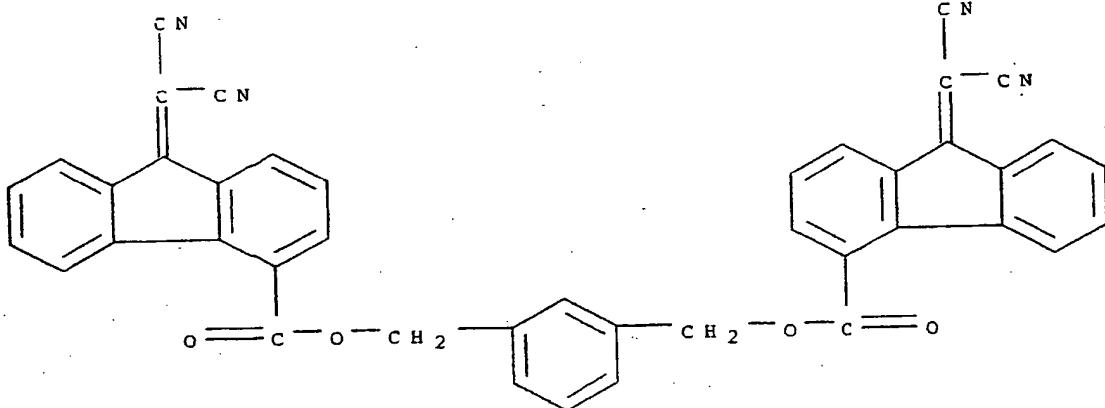


8 Substance 1/4 File ZREGISTRY - (C) ACS 2004

N 199943-46-9

N 9H-Fluorene-4-carboxylic acid, 9-(dicyanomethylene)-,  
1,3-phenylenebis(methylene) ester (9CI)

F C42 H22 N4 O4

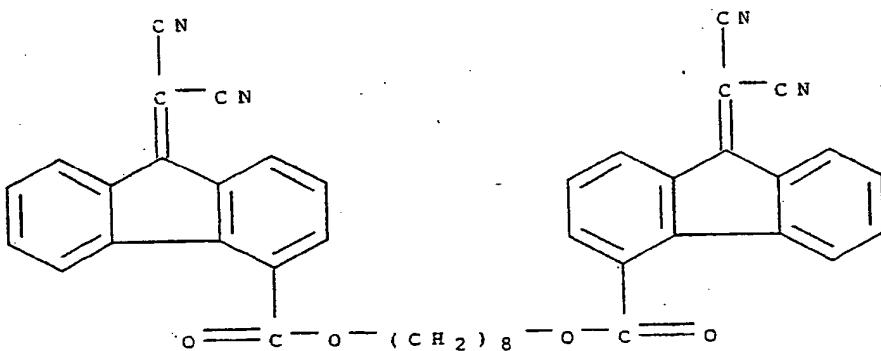


9 Substance 2/4 File ZREGISTRY - (C) ACS 2004

N 199943-39-0

N 9H-Fluorene-4-carboxylic acid, 9-(dicyanomethylene)-, 1,8-octanediy1  
ester (9CI)

F C42 H30 N4 O4



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